# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Lutz FINN et al.

Application No.: (Unassigned)          Group Art Unit:

Filed: (Concurrently)          Examiner:

For:   METHOD FOR DECODING DATA SEQUENCE ENCODED WITH AID OF BINARY
       CONVOLUTUONAL CODE (as amended)

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

      In accordance with the duty of disclosure provisions of 37 CFR § 1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the subject application.

    1.     Enclosures accompanying this Information Disclosure Statement are:

        1a. ☒ Form PTO-1449.
        1b. ☒ Copy(ies) of IDS citation(s), except for U.S. Patents and U.S. Patent Application publications for applications filed on or after June 30, 2003, in accordance with OG Notice of August 5, 2003.
        1c. ☐ English language copy of a communication(s) from a foreign Patent Office or a PCT International Search Report.
        1d. ☐ English language translation (complete, Abstract or relevant portion(s)) attached to non-English language publications as indicated on the attached Form PTO-1449.
        1e. ☐ Explanations of Relevancy of References (ATTACHMENT 1(e), hereto) for providing a concise explanation of each non-English publication.

    2.  ☒  In accordance with 37 CFR § 1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is

            (Check appropriate Items 2a, 2b, 2c and/or 2d)

      2a. ☒ satisfied for the non-English language publication(s) cited on the enclosed "English language version of the search report or action which indicates the degree of relevance found by the foreign office". (See MPEP § 609, Minimum Requirements for an Information Disclosure Statement, Part A(3): Concise Explanation of Relevance, 8th Ed., Rev. 2)

2b. ☒ set forth in the application.

2c. ☐ an English language translation (complete, Abstract or relevant portion(s)) attached to each non-English language publication as indicated on the attached Form PTO-1449.

2d. ☐ enclosed as Attachment 1(e), hereto.

3. No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than search report(s) from a counterpart foreign application or a PCT International Search Report, if submitted herewith). 37 CFR §§ 1.97(g) and (h).

Respectfully submitted,

STAAS & HALSEY LLP

Dated: Sep. 27, 2004                          By: _____
1201 New York Ave., N.W., Suite 700                Mark J. Henry
Washington, D.C. 20005                             Registration No. 36,162
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

| FORM PTO-1449 | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTORNEY DOCKET NO. 1454.1568 | APPLICATION NO. (Unassigned) |
|---|---|---|---|
| LIST OF REFERENCES CITED BY APPLICANT | | FIRST NAMED INVENTOR Lutz FINN et al. **10/509038** | |
| *(Use several sheets if necessary)* | | FILING DATE (Concurrently) | GROUP ART UNIT |

## U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NO. | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
|---|---|---|---|---|---|---|---|
| | AA | 6,226,773 | 05/01/01 | SADJADPOUR | | | |
| | AB | | | | | | |
| | AC | | | | | | |

## FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NO. | DATE | COUNTRY | TRANSLATION YES | NO | ABSTRACT |
|---|---|---|---|---|---|---|---|
| | AG | 39 10 739 | 10/11/90 | Germany | | X | |
| | AH | 42 24 214 | 01/27/94 | Germany | | X | |
| | AI | | | | | | |
| | AJ | | | | | | |

## OTHER REFERENCES (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

| | | | TRANSLATION YES | NO |
|---|---|---|---|---|
| | AK | Yufei WU et al., "Forward Computation of Backward Path Metrics for MAP Decoder", Proceedings IEEE VTC May 2000, pp. 2257-2261 | | |
| | AL | Joachim Hagenauer, "Iterative Decoding of Binary Block and Convolution Codes", IEEE Transactions on Information Theory, Vol. 42, No. 2, March 1996, pp. 429-445 | | |
| | AM | Andrew J. Viterbi, "An Intuitive Justification and a Simplified Implementation of the MAP Decoder for Convolutional Codes", IEEE Journal on Selected Areas in Communications, Vol. 16, No. 2, February 1998, pp. 260-264 | | |
| | AN | L. R. Bahl et al., "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate", IEEE Transactions on Information Theory, March 1974, pp. 284-287 | | |

| EXAMINER | DATE CONSIDERED |
|---|---|
| | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.